CLAIMS:

1. Method of determining a temperature of a semi-conductor laser (20) in a disc drive (1), the method comprising the step of measuring at least one electrical parameter (V_{CL}; I) indicative of the work point (W) of said semi-conductor laser (20).

2. Method of monitoring the operational temperature of a semi-conductor laser device (3) in a disc drive (1), the method comprising the steps of:
applying electrical power to said semi-conductor laser device (3);
measuring a light intensity (L_{out}) of a laser beam (4) generated by said semi-conductor laser device (20);
controlling said electrical power such that said light intensity (L_{out}) remains constant;
measuring at least one electrical parameter (V_{CL}; I) indicative of the work point (W) of said semi-conductor laser (20);
and determining said operational temperature on the basis of a predetermined relationship between said work point (W) on the one hand and said operational temperature on the other hand.

3. Method of operating a disc drive which comprises a semi-conductor laser device (3), the method comprising the steps of:
applying electrical power to said semi-conductor laser device (3);
measuring a light intensity (L_{out}) of a laser beam (4) generated by said semi-conductor laser device (20);
controlling said electrical power such that said light intensity (L_{out}) remains constant;
measuring at least one electrical parameter (V_{CL}; I) indicative of the work point (W) of said semi-conductor laser (20);
and taking temperature reducing steps if the measured value of said at least one electrical parameter (V_{CL}; I) indicates that the operational temperature of the laser device has reached a predetermined critical temperature (T_{CRIT}).

4. Method according to claim 3, wherein a plurality of electrical parameters (V_{CL}; I) indicative of the work point (W) of said semi-conductor laser (20) are measured; and wherein temperature reducing steps are taken if at least one of said plurality of electrical parameters indicates that the operational temperature of the laser device has reached a predetermined critical temperature (T_{CRIT}).

5. Method according to claim 3 or 4, wherein an electrical parameter (V_{CL}) is compared with a predetermined parameter level (V_{CRIT}; V_{NORM}).

6. Method according to claim 5, wherein said electrical parameter (V_{CL}) is measured at a certain known temperature, this measured value being taken as zero value (V_0); wherein said electrical parameter (V_{CL}) is measured during operation of the disc drive to yield an actual value (V_{CL});
and wherein the difference (ΔV) between the actual value of said electrical parameter (V_{CL}) and said zero value (V_0) is compared with a predetermined threshold.

7. Method according to any of claims 3-6, wherein said temperature reducing steps comprise, for instance, the step of operating a cooling device or a ventilator, or the step of reducing a clock frequency, or the step of reducing a rotational speed of a motor (2) of said disc drive (1).

8. Method according to claim 7, wherein a rotational speed of a motor (2) of said disc drive (1) is reduced when said electrical parameter (V_{CL}) reaches a first predetermined parameter level (V_{CRIT}) indicative of said semi-conductor laser device (20) having reached a predetermined critical temperature (T_{CRIT}), and wherein the rotational speed of said motor (2) of said disc drive (1) is increased when said electrical parameter (V_{CL}) reaches a second predetermined parameter level (V_{NORM}) indicative of said semi-conductor laser device (20) having reached a normal temperature.

9. Disc drive (1), comprising:
a disc drive motor (2) for rotating an optical disc (10);
a laser device (3) for generating a laser beam (4);

a control unit (5) controlling the disc drive motor (2) and the laser device (3);
wherein the control unit (5) is designed to monitor at least one electrical parameter (V_{CL}; I) indicative of the work point (W) of a semi-conductor laser (20) of said laser device (3), and to take temperature affecting steps in dependency of said at least one electrical parameter (V_{CL}; I).

10. Disc drive according to claim 9, wherein the control unit (5) is designed to control the rotational speed of said disc drive motor (2) in dependency of said at least one electrical parameter (V_{CL}; I).

11. Disc drive according to claim 9 or 10, further comprising:
a light intensity sensor (7) coupled to an input (8) of the control unit (5), disposed to receive at least a portion of the laser beam (4) generated by the semi-conductor laser (20), and designed to generate a measuring signal (S) representative of the light intensity of said laser beam (4);
the control unit (5) being designed to control said semi-conductor laser (20) such as to maintain a constant laser beam intensity.

12. Disc drive according to claim 11, wherein said at least one electrical parameter (V_{CL}; I) comprises an output voltage (V_{CL}) of the control unit (5).

13. Disc drive according to claim 11, wherein said at least one electrical parameter comprises the difference (ΔV) between the actual value of an output voltage (V_{CL}) of the control unit (5) and a zero value (V0) of said output voltage (V_{CL}) of the control unit (5) measured at a certain known temperature.

14. Disc drive according to any of claims 9-13, comprising a plurality of semi-conductor lasers (20A, 20B);
wherein the control unit (5) has a plurality of outputs (6A, 6B) each providing a corresponding control signal ($V_{CL,A}$; $V_{CL,B}$) to a corresponding one of said semi-conductor lasers (20A, 20B);
wherein the control unit (5) is designed to monitor a single signal indicative of a work point

of only one of said semi-conductor lasers (20A, 20B), and to take temperature affecting steps in dependency of said single threshold voltage indicating signal.

15. Disc drive according to any of the previous claims 9-14, wherein the control unit is designed to perform the method according to any of claims 1-8.